

Tips for Healthy Eating, Diabetes Prevention and Management

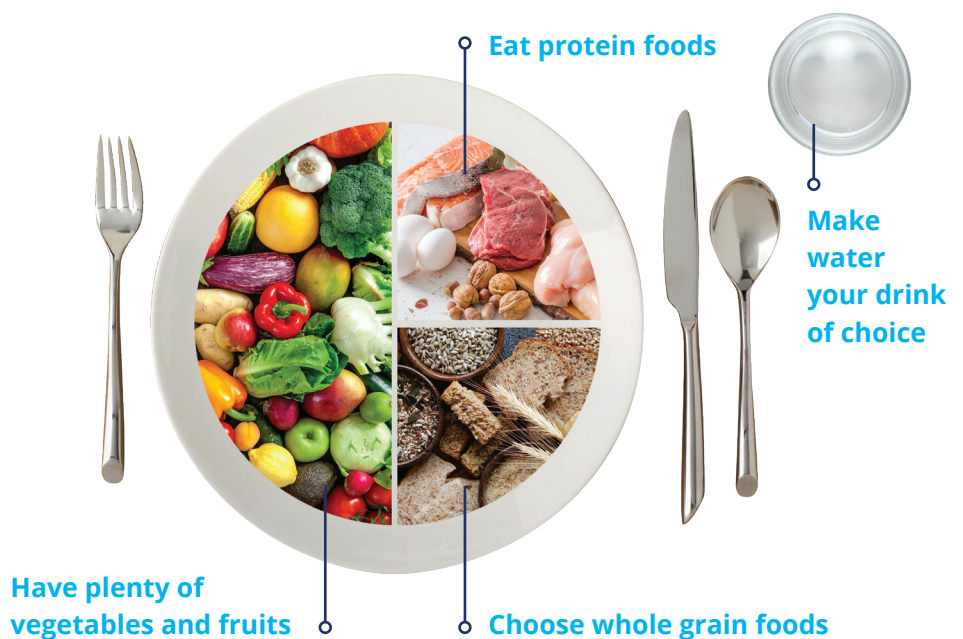


Diabetes occurs when your body cannot properly use and store food for energy. Your body's main source of energy is called glucose, a form of sugar that comes from foods that contain carbohydrate, such as fruit, milk, some vegetables, grains, starch foods and sugar. When your body cannot use glucose for energy, the glucose builds up in your blood leading to high blood sugar levels.

Depending on the type of diabetes, pills, insulin, or other injectable medication may be needed to manage blood sugar.

Type of Diabetes	How this type is treated
Type 1 diabetes The pancreas does not produce insulin. Glucose builds up in your blood instead of being used for energy.	<ul style="list-style-type: none"> • Insulin injections • Healthy eating
Type 2 diabetes The pancreas does not produce enough insulin, or your body does not properly use the insulin it makes.	<ul style="list-style-type: none"> • Healthy eating • Physical activity • Pills and/or insulin or other injectable medication
Pre-diabetes Blood glucose levels that are higher than normal, but not high enough to be diagnosed as type 2 diabetes.	<ul style="list-style-type: none"> • Healthy eating • Physical activity
Gestational diabetes High blood sugar that happens during pregnancy.	<ul style="list-style-type: none"> • Healthy eating • Insulin or pills may be used

Eat a variety of healthy foods each day



Even if someone is taking diabetes medications, all types of diabetes are managed better with healthy eating. Knowing what to eat and how much to eat will help you manage your blood sugar levels.

- Eat more vegetables (Sabji/salad - not potatoes). These are very high in nutrients and low in calories.
- Choose lean animal proteins such as fish, chicken, lean meats, low-fat cheese, paneer, or eggs. Select more vegetable protein like tofu and dahl.
- Select plant oils such as olive and canola, and nuts instead of animal fats and coconut oil.
- Eat small portions of grains and starches including whole grain roti, chapati, breads and cereals; rice (brown, basmati, parboiled), noodles, or potatoes at each meal.
- Have plain yogurt and a piece of fruit to complete your meal.

Handy portion guide

Your hands can be very useful in estimating the right amount of food to eat. When you are planning a meal, use the following portion sizes as a guide:



Fruits/Grains & Starches

Choose an amount the size of your fist for grains or starches, or fruit.



Vegetables

Choose as much as you can hold in both hands. Choose brightly coloured vegetables.



Protein Foods

Choose an amount the size of the palm of your hand and the thickness of your little finger.



Fats

Limit fat to an amount the size of the tip of your thumb.



Fruits/Grains & Starches

Examples:

Mango, banana, potatoes, brown rice, bread, chapati

Vegetables

Examples:

Okra, eggplant, bell peppers

Protein Foods

Dahl, paneer, tofu, lean beef, poultry, fish, yogurt, milk (skim, 1%), cheese

Fats

Examples:

Non-hydrogenated margarine, canola oil, olive oil, peanut oil

Sample Meal Plans

Northern Culture	Southern Culture
<p>Breakfast:</p> <ul style="list-style-type: none"> • 2 Slices of whole grain bread • Peanut butter (2 tbsp, 30 mL) • Low-fat yogurt (1/3 cup, 75 mL) • Chai tea – no sugar (with low-fat milk 1/2 cup, 125 mL) 	<p>Breakfast:</p> <ul style="list-style-type: none"> • Upma (2/3 cup, 150 mL)* measured after cooking • Vegetable chutney (2 tbsp, 30 mL) • Low-fat yogurt (1/3 cup, 75 mL) • Chai tea-no sugar (with low-fat milk 1/2 cup, 125 mL)
<p>Lunch:</p> <ul style="list-style-type: none"> • 2 Whole wheat chapati (6", 15 cm each) • Low-fat yogurt (3/4 cup, 175 mL) • Green salad (low-calorie dressing) • Sabji with paneer, no potato (1/4 cup, 60 mL) • 1/2 medium mango • Chai tea or black coffee – no sugar 	<p>Lunch:</p> <ul style="list-style-type: none"> • Pongal (3/4 cup, 175 mL)* measured after cooking • Vegetable chutney • Lean chicken (2 oz, 60 g) • Low-fat yogurt (3/4 cup, 175 mL) • Green salad • Saag • 1 small banana • Water
<p>Dinner:</p> <ul style="list-style-type: none"> • Rice, basmati/brown (2/3 cup, 150 mL)* measured after cooking • Dahl (1/2 cup, 125 mL) • Fish (1 oz, 30 g) • Green salad • Sabji, no potato • 1 medium orange • Water 	<p>Dinner:</p> <ul style="list-style-type: none"> • Rice, basmati/brown (2/3 cup, 150 mL)* measured after cooking • Sambhar (1 cup, 250 mL) • Tofu curry (1 oz, 30 g) • Green salad • 1 Medium orange • Water
<p>Evening Snack:</p> <ul style="list-style-type: none"> • Roasted chickpeas (1/2 cup, 125 mL) 	<p>Evening Snack:</p> <ul style="list-style-type: none"> • Greek yogurt with berries

The sample meal plans are a guide only. See a registered dietitian for advice on making healthy food choices.



Being Well Helps You and Your Family

Here are some tips to help you before you see a registered dietitian.

When to eat?	
Tips	Why? Because...
<ul style="list-style-type: none">• Be sure to eat breakfast.• Eat three meals per day at regular times.• Space meals no more than six hours apart.• You may want to include a healthy snack.	<ul style="list-style-type: none">• It provides a good start to the day.• Eating the right amount at the right time helps keeps your blood glucose in balance.
<ul style="list-style-type: none">• Pack healthy foods with you (such as whole grain crackers, cheese and vegetables) in case you are going to be away from home at meal time.	<ul style="list-style-type: none">• This helps you have healthy choices, wherever you go.
What to Eat	
<ul style="list-style-type: none">• Eat a variety of foods at each meal or snack	<ul style="list-style-type: none">• Choosing foods from all food groups will make sure that the body gets all the nutrients it needs to be healthy.
<ul style="list-style-type: none">• Limit sugars and sweets such as regular soft drinks, desserts such as gulab jamun, jalebi, and rabri.• Artificial sweeteners can be safe in small amounts.	<ul style="list-style-type: none">• The more sugar you eat or drink, the higher your blood glucose will be.
<ul style="list-style-type: none">• Limit high fat and greasy foods, such as fried foods, namkeen, kachori, and jalebi.• Prepare foods in a healthy way, such as baking, broiling, braising, steaming, poaching, roasting, stir-frying, sautéing.	<ul style="list-style-type: none">• High fat foods are hard on the heart and may cause weight gain.• A healthy weight is easier for the heart and helps with blood glucose control.
<ul style="list-style-type: none">• Eat at least two different kinds of vegetables at each meal.	<ul style="list-style-type: none">• Vegetables are high in the nutrients the body needs to be healthy.
<ul style="list-style-type: none">• Include foods high in fibre (whole grain breads, roti, and cereals, sweet potato, yam, lentils, dried beans, brown rice, vegetables and fruits).	<ul style="list-style-type: none">• High fibre foods help you feel full, and lower your blood glucose and cholesterol levels.
<ul style="list-style-type: none">• If you are thirsty, drink water.	<ul style="list-style-type: none">• Drinking regular pop, fruit juice, sweetened coffee and tea, will raise your blood glucose.
How much to eat	
<ul style="list-style-type: none">• Eat slowly and stop when you feel full and satisfied.	<ul style="list-style-type: none">• The right amount of food gives your body what it needs to be healthy.• If you eat too much, your body will store the extra energy as fat.• You may also gain weight by eating more than you need.

Physical activity is also a way to live well with diabetes

Tips	Why? Because...
<ul style="list-style-type: none"> • Try to do some physical activity such as walking every day 	<ul style="list-style-type: none"> • Regular physical activity will improve your blood glucose control. • Diabetes Canada recommends 150 minutes of physical activity each week. • You can break down the 150 minutes of physical activity into 30 minutes, five times a week . • You will also feel better in body and spirit.

How to add physical activity to life?

Tips	Examples
<ul style="list-style-type: none"> • Build time for physical activity into your daily routine. 	<ul style="list-style-type: none"> • Walking around the neighbourhood, taking the stairs, getting off the bus one stop early.
<ul style="list-style-type: none"> • Start slowly and gradually increase the amount of effort. 	<ul style="list-style-type: none"> • Start from slow walking. When you are ready, increase your pace.
<ul style="list-style-type: none"> • Try to be active most days of the week. Diabetes Canada recommends 150 minutes of moderate- to vigorous-intensity each week. 	<ul style="list-style-type: none"> • Brisk walking, raking leaves, jogging, swimming, basketball, vacuuming.
<ul style="list-style-type: none"> • Strength resistance exercises are recommended at least two times a week. 	<ul style="list-style-type: none"> • Weightlifting, push-ups, sit ups and resistance band exercises.
<ul style="list-style-type: none"> • Make family activities active instead of watching TV or going to a movie. 	<ul style="list-style-type: none"> • Taking a bike ride around the neighbourhood or taking the family swimming at the local pool.
<ul style="list-style-type: none"> • Challenge yourself by trying new activities. 	<ul style="list-style-type: none"> • Learn to dance, play tennis or do yoga.
<ul style="list-style-type: none"> • Be active indoors. 	<ul style="list-style-type: none"> • Weightlifting, push-ups, sit ups and resistance band exercises. Climb up and down the stairs for 10 minutes at a time or walk in a mall.



Limit alcohol consumption

Alcohol can affect blood glucose levels. It can also cause you to gain weight and change how your body uses medicine.

Talk to your healthcare team about how much alcohol is safe for you.

Take care of your whole body for a healthier life! Manage your diabetes in a healthy way!

Looking for more information? Visit www.diabetes.ca



Glossary

Carbohydrate Carbohydrate gives your body energy. It is found in foods like grains (i.e. rice, pasta, noodles, wheat, oats etc), fruit, milk, yogurt and starchy vegetables (i.e. potatoes, corn). Carbohydrates are broken down into glucose in your body. When you have diabetes, glucose from your food, is not used in the right way. When it is not used in the right way, there can be too much glucose in your blood and causing your blood glucose levels to rise higher than it should be.

Physical activity Physical activity is something that everyone can do to improve health and well-being. It does not involve going to the gym or running a marathon. Physical activity can simply be walking up and down the stairs and walking around the neighborhood and doing housework such as vacuuming.

Diabetes Canada recommends 150 minutes of moderate to vigorous-activity each week. It also recommends adding resistance exercise, such as weight lifting and resistance band exercise, to your physical activity routine at least two times each week.

<http://guidelines.diabetes.ca/docs/patient-resources/benefits-of-physical-activity.pdf>

Aerobic activity Aerobic activity makes you breathe harder and your heart beat faster.

Examples include: brisk walking, skating and bike riding

<http://guidelines.diabetes.ca/docs/patient-resources/maintaining-aerobic-exercise.pdf>

Resistance Exercise Resistance exercise involves brief repetitive exercises with weights, weight machines, resistance bands or one's own body weight to build muscle strength.

<http://guidelines.diabetes.ca/docs/patient-resources/resistance-exercise.pdf>

**DIABETES
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Diabetes Canada is making the invisible epidemic of diabetes visible and urgent. Close to 11.5 million Canadians have diabetes or prediabetes. Now is the time to End Diabetes - its health impacts as well as the blame, shame and misinformation associated with it. Diabetes Canada partners with Canadians to End Diabetes through education and support services, resources for health-care professionals, advocacy to governments, schools and workplaces, and, funding research to improve treatments and find a cure.

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